

COMMUNITY RATING SYSTEM (CRS) PROGRESS REPORT

On February 3, 2004, the City of Fort Lauderdale City Commission adopted Resolution R-2, 04-196, which is the Broward County Local Mitigation Strategy (LMS). The LMS is available for public review at the Fort Lauderdale City Clerk's Office, 100 North Andrews Avenue, Fort Lauderdale, FL 33301. The City of Fort Lauderdale was involved in the initial preparation of this plan and continues to sit on the Local Mitigation Strategy Working Group and Planning Committee to monitor progress, make updates, and revise the plan.

The LMS serves as the Floodplain Management Plan for the City of Fort Lauderdale for the purpose of the Community Rating System (CRS) Activity 510. One of the requirements to maintain credit for this activity is the preparation and distribution of an annual progress report. This document serves as that progress report. It is prepared by the City of Fort Lauderdale CRS Workgroup and will continue to be prepared on an annual basis. It is submitted to our governing body, the Fort Lauderdale City Commission, and is available on our website for public review. Please see www.fortlauderdale.gov. A copy was also distributed to the local major newspaper, the *Sun-Sentinel*. The following is a review of progress.

After a concerted, proactive effort to achieve a higher CRS rating that would result in a greater savings on flood insurance premiums for thousands of neighbors, the CRS workgroup succeed in lowering the City's score to a Class 7 rating. In March 2012, the CRS workgroup submitted an application for re-modification to obtain a Class 6 rating. We are currently waiting to hear back from the Federal Emergency Management Agency (FEMA). If approved by FEMA, Class 6 rating will be posted in March 2013.

The current Broward County LMS has been reviewed and updated to become the "Enhanced Local Mitigation Strategy" (ELMS). The ELMS was submitted to the Florida Department of Emergency Management, who approved it, then forwarded it to FEMA for final approval. After the ELMS is approved by FEMA, the CRS workgroup will bring it to Commission for adoption. Moreover, with the adoption of the ELMS we shall receive additional points for our Floodplain Management Plan.

Preventative Activities

The City-wide Stormwater Master Plan has been received and reviewed by the City Commission and Staff. Commission and staff are currently reviewing the "Level of Service" that the City will be providing. The Stormwater Master Plan addresses, but is not limited to, the following issues:

1. Identify, catalog and categorize existing citywide storm drainage problems.

2. Develop planning level improvement recommendations and cost estimates for existing storm drainage problems. Address funding methods for the improvements based on existing or proposed funding resources.
3. Review current status of the City's stormwater-related organization, funding mechanisms, policies and procedures. Review current ordinances, revenues, and expenditures for capital improvements (including design, project management, and construction of improvements), maintenance and operations. Make recommendations on staffing levels and changes to the existing organization, ordinances, project delivery strategies (including funding mechanisms, policies and procedures), maintenance and operations.
4. Review existing and proposed stormwater regulatory issues that may affect the City's stormwater program, especially as it relates to the City's Municipal Separate Storm Sewer System National Pollution Discharge and Elimination System (MS4 NPDES) Permit. Make recommendations, including funding resources to address the regulatory requirements.

The Stormwater Master Plan is intended to be a guide for improving the City's storm drainage system performance and meeting regulatory compliance through the year 2025. The Master Plan will provide a preliminary schedule of prioritized capital improvements necessary to allow the City's storm water systems to meet the increasing performance and regulatory demands and modernize existing systems while maintaining the high level of service expected in a modern urban environment. The final plan has been generated and various departments within the City are reviewing specific project scopes.

Based on the Stormwater Master Plan, four major endeavors have been undertaken by the engineering department. Evaluations have been started for the following neighborhoods: Durrs, Dorsey-Riverbend, Progresso Village, Edgewood, and River Oaks. Full LIDAR data surveys and drainage proposals for the neighborhoods are being commissioned at an approximate value of \$850,000. From these evaluations, the Commission will decide the project implementation funding and timing.

The City has also applied for, and received, the following grant to improve stormwater:

River Oaks Stormwater Park – The city received an \$800,000 grant that will be used for development of the Stormwater Park and its final engineering design. Portions of the grant have been used to mitigate the current flooding conditions from the neighborhood. Relief of flooding has already been reported from the removal of fill on the site. The development plans were submitted for permits to the County and future development is pending funding.

Property Protection Activities

The City continued its program to sustain and even improve our Community Rating System (CRS) Score. The CRS Work Group met on a regular basis throughout the entire year in order to both maintain and investigate ways to increase the City of Fort Lauderdale CRS rating. We identified several areas for improvement and took the necessary steps to implement those improvements. The CRS Work Group will continue to meet and strive to identify new ways to enhance this program.

The City of Fort Lauderdale has received \$2.4 million in Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) funds to retrofit City buildings. The City has implemented a switchgear elevation project and hurricane wind retrofit for the building that houses the PD Headquarters and 911 Dispatch and will be completed by November 30, 2012. Management is currently reviewing the HMGP grant and funds being used to retrofit City Hall for wind mitigation.

The City has received many inquiries from residents interested in taking advantage of the FEMA - Repetitive Loss Grants Program. Information and coordination was initiated with those homeowners. The City, in support of mitigating the severe repetitive loss properties is undertaking the FEMA Grants Program. Commission and City Management have provided comment and feedback toward the effective implementation of the grants and full program availability is expected to be advertised in 2013.

Floodplain Protection Activities

Below is a map of the protected open space within the City's floodplain. No net increase was realized for the 2011/12 year.

- Total area of the City - 22565.04 Acres,
- 35.25 Square Miles Total area of flood zones (not X) within the City
- 13237.06 Acres, 20.68 Square Miles Total area of water within the City (not including Atlantic Ocean)
- 2184.81 Acres, 3.41 Square Miles

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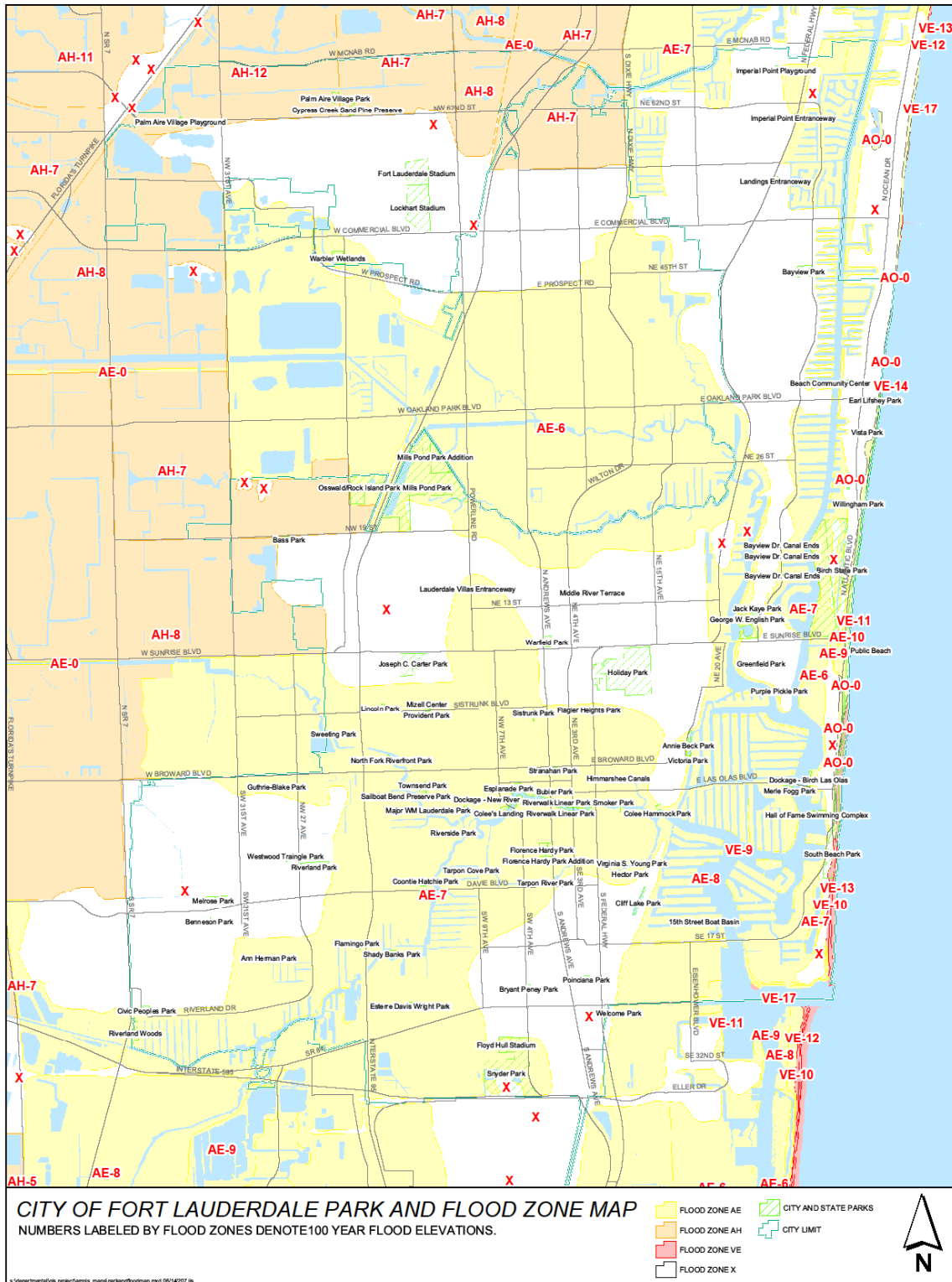


FIGURE 1-OPEN SPACE

Emergency Service Activities

During a three-day period starting Saturday, October 29th, the City of Fort Lauderdale, like many other South Florida cities, experienced street flooding following a high volume of rain, receiving more than 15 inches in a 72-hour period. This was compounded by the seasonal high tides that peaked from October 26th - 28th but the tides were still above average until November 2nd. Information received from the Broward Drainage District indicates the average rainfall for October is 5.53 inches. Additional data shows the groundwater table came up over 2 feet in a very short period of time. The City lost its unsaturated underground zone fast, leaving no place for the storm water to go.

The Emergency Operations Center (EOC) was at a level 3; monitoring the weather for Hurricane Rina as she was moving in South Florida's direction the week of October 24, 2011. EOC was advised by the National Hurricane Center (NHC) that Hurricane Rina was downgrading and would turn into a tropical depression and turn back south into the Caribbean Sea, but that South Florida would have some rain that was associated with her. NHC also advised the EOC that a cold front was headed down into South Florida and would be caught in a "squeeze" effect.

Timeline of Events

- Saturday, October 29, and Sunday, October 30 - Emergency Management Bureau was in contact with the NHC and was advised when large bands of rain or severe weather were headed towards the beach area for the International Boat Show.
- Monday, October 31 at 1:30am: Fire Dispatch contacted the Emergency Management Coordinator, to advise that fire crews were running many calls for flooding and for water in neighbor's homes.
- Monday, October 31: Carter Park opened for shelter/disaster assistance.
- Carter Park Gymnasium sheltered the following number of people and provided meals:
 - 10/31 - 30 people
 - 11/1 - 15 people
 - 11/2 - 5 people
- Monday, October 31: Fire Prevention conducted a Rapid Impact Assessment (RIA) and reported the damage to the Broward County EOC and also provided the information the Emergency Management Bureau.
- Monday, October 31: Fort Lauderdale CERT Team activated, CERT members assisted American Red Cross at Shelter/Assistance Center with feeding and other administration duties. Twenty-Seven (27) CERT members where activated for this event.
- Monday, October 31: Damage assessments were conducted in the areas that the RIA provided showed the most accumulation, or the lists of calls that fire dispatch had written down. Damage assessment results are listed below.
- Thursday, November 3: The Emergency Management Bureau went door to door for damage assessments with representatives from the State (SERT), FEMA, SBA and Broward County EOC.
- Tuesday, November 15: The U.S. Small Business Administration (SBA) issued a Physical Disaster Declaration for the State of Florida, which includes Broward County.

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Homeowners and businesses that were affected by the severe storms and flooding on October 30 and 31, 2011, may be eligible for financial assistance from the SBA.

Joint Preliminary Damage Assessment Summary

Northwest Sections of Fort Lauderdale:

- 178 multi-family (MF) homes, 30 single family (SF) homes, as well as three business locations were inspected for signs of water lines and possible water intrusion
- One owner was in their SF in which they were insured and repairs were underway
- 80% of tenants were in their MF dwellings – all tenants did not have renters insurance
- Two out of three business establishments had insurance
- Water intrusion was either less than 3 inches or limited to garage or carport flooding at 23 SF homes, and 98 MF units
- Water intrusion was 7 inches or less at 7 SF homes and 80 MF units

Northeast Section of Fort Lauderdale:

Three MF buildings with underground garages below flood level were flooded; these buildings had insurance

- Water intrusion was either than 3 inches or limited to garage and carport flooding
- Remainder of visited residences did not meet the minimum level of flood damage assessment

** All resident/owners had insurance; tenant renters had no insurance (majority of residents appeared to be of low income level)

Southwest Sections of Fort Lauderdale:

- Water intrusion between three to nine inches
- Over 120 sites were accessed
- There was a general consensus that though backed up sewage into homes may have occurred; there was no possible way of quantifying the extent of those particular damages

*** Few of all residents/owners or tenant renters had insurance; majority of residents appeared to be of low-income level

Small Business Administration continued to do evaluations until 11/23/11.

Neighbor Assistance

On November 15, 2011, the U.S. Small Business Administration (SBA) approved Governor Scott's request for a Disaster Declaration, in response to the Severe Storms and Flooding in Broward County. Affected residents and businesses can apply for low-interest disaster loans from the SBA. The declaration covers all of Broward County.

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Under this declaration, qualified residents may be eligible for home and/or business disaster loans to repair or replace disaster-damaged real estate or property. Loans up to \$200,000 are available to homeowners to repair or replace damaged or destroyed real estate. Homeowners and renters are eligible for loans up to \$40,000 to repair or replace damaged or destroyed personal property.

SBA's customer service representatives will be on hand at the Disaster Loan Outreach Center to answer questions about the disaster loan program, explain the process, and to help individuals complete their applications. The City's Mills Pond Park Community Center is hosting the Outreach Center.

Interest rates are as low as 2.063 percent for homeowners and renters, 3 percent for non-profit organizations and 4 percent for businesses with terms up to 30 years. Loan amounts and terms are set by the SBA and are based on each applicant's financial condition.

Furthermore, the Flood Warning notification system was utilized after the October 2011 floods and throughout the early part of the FY 2012 hurricane season (TS Debby and TS Isaac). Electronic notifications are received from National Weather Service anytime a weather event is threatening the area and the City's internal notification tools (e-mail, cable TV channel, radio channel, Code RED phone alert, press releases, etc.) are used to disseminate important public safety information. Furthermore, the Department of Emergency Management sent out on Thursday, February 2 - Hurricane and Flooding Awareness Day that was disseminated to all Department Directors to pass along to their employees as well as posted on our City Website.

Structural Projects

Below are the drainage projects completed over the 2011-2012 year. These included new drain systems in the following locations:

11713A - NE 30th Place & NE 26 Street- Drainage: Constructed January 2012

Street work, sidewalks, driveways, catch basins, exfiltration trenches, etc. along NE 30th Place. Construction to start end of October 2011.

11613B - SW 21 Ave at SW 15 Street - North & South to End of Cul-de-sac Constructed September 2011

Roadway improvements undergrounding of utilities, storm drainage improvements and asphalt resurfacing

11613o - Riviera Isles Storm Water Tidal Flooding: Constructed January 2011

Completed the retrofit of all 17 drainage outfall pipes for this coastal neighborhood. Installed seventeen (17) inline checkmate valves to prevent high tide to reach and flood the streets. Maintenance of the valves has started on September 2011, and they will be monitored for 5 years to evaluate performance and results.

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11426 - North Fork of the New River PCD Install: Constructed February 2012

The proposed North Fork Pollution Control Device installations will occur at the following locations: Harris Terrace Outfall (42-inch diameter) and the North Fork Elementary (72-inch diameter) Outfall. The goal of the pollution control devices is to improve water quality from the identified storm water outfalls. Contract award by end of October 2011. Construction shall start prior to February 2012.

11713 - 2011-12 Annual Storm Drainage Contract: Completed last project October 2012

This project is for the design & construction of various storm water drainage improvement projects throughout the city. Including, the installation of new underground piping, exfiltration systems, drainage wells, drainage outfalls, street gutters, and all things related.

11613 - 2010-11 Annual Storm Drainage Contract: Completed last project June 2012

This project is for the design & construction of various storm water drainage improvement projects throughout the city for the 2010-11 FY. Including, the installation of new underground piping, exfiltration systems, drainage wells, drainage outfalls, street gutters, and all things related. Contract Extension for GPE.

11613A -NE 15 Ave @ NE 2 Street - Constructed July 2011

Roadway improvements undergrounding of utilities, storm drainage improvements, sidewalk reconstruction and asphalt resurfacing

11713E -816 SW 16 Street: Constructed April 2012

Storm water improvements including swale restoration, new exfiltration trenches, interconnection piping, and catch basins. Private property building floor flooding solved.

11713F - 1200 SW 21 Court Constructed July 2012

Storm water improvements including swale restoration, new exfiltration trenches, interconnection piping, and catch basins. Private property building floor flooding solved.

Swales

The Water and Wastewater Division Right-of Way Maintenance has two swale crews that re-grade and sod utility right-of-ways throughout the City. The City has had an active swale program since 1999 that specifically addresses right of way maintenance. Swales are installed and maintained in accordance with the City of Fort Lauderdale ordinances 18-12, 26-145, 47-20-13, and 47-21-14.

The Public Works Department proactively installs swales at homeowner's addresses at no cost to the homeowner. The installation of swales enhances stormwater drainage and recharge of the surficial aquifer. It secondarily creates open space and provides for detention of stormwater. The program activities for the year August 2011 through July 2012 have retrofitted or evaluated 168 properties for swales. To date, over 3000 swales were created or evaluated.

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Ongoing Projects (2012 - 2013)

11713B - SW 4th Ave between SW 5 St to SW 4 Ct: pending sidewalk easement
11780K = 11713C (old) - SW 4th Ave @ SW 5th St,
11780E - 89 Hendricks Isle Drive
11780F - 3110 Belmar Street
11780N - NE 20 Ave @ NE 7 Street
11780G - 804 SW 13 Street
11780H - NE 23 St @ Ocean Blvd
11780i - 2625 NE 11 Ct
11780J - 616 NE 17 Ter

Outreach Projects

The City of Fort Lauderdale conducted multiple citywide outreach projects to convey important flood protection information to key audiences including residents, local businesses and visitors. The outreach projects included information on the importance of obtaining flood insurance, safety tips to protect residents and their property from flood hazards, instructions to obtain a FIRM map and contact information for additional City resources.

To ensure broad distribution and penetration into several audiences, this information was provided in a variety of formats. A special informational flood insert was mailed Citywide in March and September 2012. Hard copies of brochures were distributed at public meetings; information was broadcast on our City radio station and posted on our public access TV channel; electronic materials were posted on the City website; and information was distributed to all City homeowner associations and condo associations through civic packet mailings. In addition, the City mailed a letter and informative brochures to all repetitive loss properties and conducted a geographic analysis of the areas surrounding those properties and drafted and mailed a letter to more than 1,100 residences and business surrounding the repetitive loss properties to inform them of potential flood hazards and the availability of flood insurance.

Review of any delays to progress

In general the economic downturn has affected all levels of government. A decreased tax base with a falling market and substantial budget cuts reduced new projects feasibilities. Substantial progress has still been achieved throughout the year. Some delay has occurred due to the slow down of the real estate market.

Recommendations for new projects or revised recommendations

The current Broward County LMS has been reviewed and updated to become the "Enhanced Local Mitigation Strategy" (ELMS). The ELMS was submitted to the Florida Department of Emergency Management, who approved it, then forwarded it to FEMA for final approval. After the ELMS is approved by FEMA, the CRS workgroup will bring it to

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Commission for adoption. Moreover, with the adoption of the ELMS we shall receive additional points for our Floodplain Management Plan.

The Broward County Local Mitigation Strategy Working Group has revised and strengthened the LMS this year. It has undertaken an aggressive schedule and plans exist to revise Chapter 4, Chapter 5, the Hazard Analysis, and the project prioritization tool. The City of Fort Lauderdale is a primary participant in this process and the group will work to systematically develop revised recommendations. The City CRS Work Group's recommendations for the future include: 1) sustainment and possible modification of our CRS rating; 2) enhanced public outreach projects; 3) exercising of notification systems; and 4) updating our website to include additional information and resources regarding flood information.

The next Progress Report will be submitted approximately one year from now.